

03040202-130

(Big Swamp)

General Description

Watershed 03040202-130 is located in Florence County and consists primarily of **Big Swamp** and its tributaries. The watershed occupies 38,152 acres of the Lower Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Rains-Norfolk-Lynchburg-Wagram series. The erodibility of the soil (K) averages 0.15; the slope of the terrain averages 2%, with a range of 0-6%. Land use/land cover in the watershed includes: 36.4% scrub/shrub land, 32.7% forested land, 25.5% agricultural land, 5.1% forested wetland (swamp), 0.2% urban land, and 0.1% water.

Big Swamp originates near the Town of Pamplico with the confluence of Big Swamp Branch (Gum Branch) and Buck Branch. Further downstream, Cypress Branch and Little Swamp enter the system. There are a total of 51.8 stream miles in this watershed and several ponds totaling 61.1 acres. Big Swamp is classified FW* (dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8.5) and the remaining streams in the watershed are classified FW. The Big Swamp Watershed flows into the Lynches River.

Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
PD-168	S	FW*	BIG SWAMP AT S-21-360 1.1 MILES W OF PAMPLICO
PD-169	S	FW*	BIG SWAMP AT US 378 & SC 51 0.9 MILES W OF SALEM

Big Swamp - There are two monitoring sites along Big Swamp. The stream frequently does not flow or is dry at the monitoring locations. Aquatic life uses are not supported at the upstream site (**PD-168**) due to dissolved oxygen excursions, compounded by a significant decreasing trend in dissolved oxygen concentration. This is a secondary monitoring station with sampling purposely biased towards periods with potentially low dissolved oxygen concentrations. However, the dissolved oxygen concentrations were inordinately low and the decreasing trend in dissolved oxygen suggests that conditions are deteriorating. Recreational uses are fully supported.

At the downstream site (**PD-169**), aquatic life uses are not supported due to dissolved oxygen excursions. This is another secondary monitoring station and purposely biased towards periods with potentially low dissolved oxygen concentrations. However, the dissolved oxygen concentrations were inordinately low. There is a significant increasing trend in pH. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions, compounded by a significant increasing trend in fecal coliform bacteria concentration.

NPDES Program

Active NPDES Facilities

RECEIVING STREAM

FACILITY NAME

PERMITTED FLOW @ PIPE (MGD)

COMMENT

NPDES#

TYPE

LIMITATION

BIG SWAMP

TOWN OF PAMPLICO

PIPE #: 001 FLOW: 0.2

PIPE #: 001 FLOW: 0.3 (PROPOSED)

WQL FOR DO,TRC,NH3N,BOD5

SC0021351

MINOR DOMESTIC

WATER QUALITY

Growth Potential

There is a low potential for growth in this watershed, which contains the Town of Pamplico and a portion of the Town of Salem. Water and sewer services are available in and immediately surrounding Pamplico. The remainder of the watershed is rural with agricultural uses.